

REMARKS

Prior to the amendment set forth above, original Claims 1-25 were pending, including independent Claims 1, 24 and 25. New Claims 26-27 are hereby added by the present amendment, such that after entry of the present amendment, 27 total claims will be pending, Claims 1-27, including independent Claims 1, 24 and 25.

In section 1 of the current Office Action, the Examiner objects to Claim 3 as lacking an explanation of the meaning of the acronym "PCG." Each introduction of PCG in the claims has accordingly been clarified.

Amendments to the Claims

No new matter is added by the current amendments. Support for the amendments to independent Claim 1 may be found in Applicants' specification at page 14, lines 11-17, as well as in FIGURE 3 and the accompanying text, particularly from page 16, line 27, to page 17, line 18. Amendment of "at least one mobile station" to --a mobile station-- is not for reasons related to patentability, but merely simplifies the language required to refer to the affected mobile station.

Independent Claim 24 is amended in a manner similar to Claim 1, but is also amended to preclude interpretation of the scope of the claim under 35 USC 112, sixth paragraph. To that end, the "means plus function" language has been substantially replaced by reference to generic apparatus subsections. The recited apparatus is necessarily disclosed in Applicants' specification by implication, because the skilled person will understand the generically described apparatus to be unavoidably required to perform the functions attributed to the mobile station. Alternatively or additionally, the recited apparatus may be found in the IS-95A, IS-95B and/or IS-2000 specifications that are incorporated by reference. Moreover, because Claim 24 is directed to apparatus, it has been amended so that only apparatus subsections that are located in a single device, such as a mobile station, are required (though base station equipment features are expected in the communication system in which the apparatus is used). "Soft handoff functions" are necessarily performed during a soft handoff. As is well known, a mobile station does not necessarily "perform" a soft handoff by itself, and, accordingly, the claimed apparatus is now required only to perform "soft handoff functions."

Independent Claim 25 is amended similarly as Claim 1, and also to correct minor informalities. For example, the software is more appropriately required to "direct performance of," rather than perform, certain

actions. Performance of "handoff functions" corrects for the distributed nature of handoffs, so that claimed instructions may be performed within a single entity, as described above with respect to Claim 24.

New Claims

Support for new Claims 26 and 27 may be found, for example, in the same portions of Applicants' specification that have been identified above with respect to the amendments to independent Claim 1, particularly FIGURE 3 and the text associated therewith.

Rejections under 35 USC § 102 and § 103

In section 2 of the current Office Action, the Examiner rejected Claims 1-8, 10, 13-19 and 24 as anticipated by U.S. Patent 6,307,847 to Tiedemann, Jr. ("Tiedemann"). It is respectfully submitted that each of the independent claims, as presently amended, recites features that are neither anticipated by Tiedemann, nor obvious in view of Tiedemann, whether alone or further in view of U.S. Patent 6,744,754 to Lee ("Lee," together, "the cited prior art."). Consequently, each of the dependent claims are also rendered nonobvious over any combination of the cited prior art, at least by virtue of properly depending from a nonobvious claim.

As compared to the method claimed, for example, in Claim 1 as currently amended, Tiedemann uses a very different approach to determine which base stations ("BSs") to gate off during a soft handoff. Tiedemann begins with the strongest available base station ("BS") signal, and then determines a " Δ_r " signal based thereon (see, *e.g.*, col. 11 lls. 18-22, and col. 18 lls. 12-14). In fact, Δ_r is, generally, merely a fixed offset (or delta) below the current strongest signal from an active BS. Information as to whether or not the signal from each particular BS exceeds the Δ_r value is sent to the BSs, and/or to the BS controller (see, *e.g.*, col. 13 lls. 5-12). That information then forms the basis for deciding whether transmissions from particular BSs are enabled or not (see, *e.g.*, col. 14, lls. 25-29). If a particular BS is below the Δ_r value, then that BS is directed to stop transmitting (see, *e.g.*, col. 14 lls. 29-35). Thus, desired BSs are selected based upon their signal strength compared to the strength of one or more (typically the strongest) received signals.

This selection basis does not consider whether the BS signals that are enabled actually provide enough strength to maintain a reasonable quality of service (QoS) for the mobile station ("MS").

Applicants have observed that it is important to determine whether the MS has sufficient signal strength to ensure a minimum QoS. As such, Applicants describe a method by which sufficient BS signals are enabled so that the MS receives a sufficiently powerful combined signal. In order to achieve this important goal, Applicants select desired BSs based on a threshold parameter that is, in turn, based upon the

reception needs of the MS. This is a starkly different threshold than that of Tiedemann (Δ_r), which is based instead on some combination of incidentally received signal strengths.

Claim 1, as presently amended, recites in part (underlining added for emphasis):

determining a desired set of base stations, based upon

- (i) obtaining a threshold parameter based upon receiver needs for proper reception, and
- (ii) comparing a sum of one or more base station signal strengths to the threshold parameter;

In view of the preceding remarks, the Examiner will understand that such a threshold parameter reflects the fact that Applicants base their gating decision on a value which is not based upon arbitrary received signal levels, but rather based upon the signal level that is needed for proper reception. It is respectfully submitted, and will come as no surprise to the Examiner, that Tiedemann does not teach such a threshold parameter, much less the combination of clauses (i) and (ii). Applicants' approach to determining which BSs to gate off is fundamentally different from that taught by Tiedemann, and, therefore, the invention defined in Claim 1 (as currently amended) is nonobvious over Tiedemann and any of the cited prior art.

The Examiner cited Lee with respect to Claims 11 and 12 for particular techniques for averaging signals. If Claim 1 is nonobvious over the cited prior art, then so also are Claims 11 and 12, at least by virtue of their proper dependence from Claim 1. Though the Examiner did not cite Lee for elements of an independent claim, Lee is briefly addressed for completeness.

While Lee may fairly represent alternative prior art filter techniques for averaging (IIR, FIR, etc.), Lee has nothing to do with the broader context of Tiedemann. That is, Lee has nothing to do with determining a desired set of base stations, or, conversely, determining base stations to be gated off. Moreover, Lee describes methods for forward link power control under ordinary circumstances, and does not suggest any techniques for the special circumstance of cell selection handoff. The power control techniques of Lee are inapplicable for the purposes of Tiedemann. As such, it is difficult to see, at least in the absence of impermissible reference to the teaching of Applicants' specification, how one could possibly combine the teachings of Lee with that of Tiedemann to arrive at the invention as set forth in Claim 1 as presently amended. At least aside from the filtering/averaging techniques for which the reference was cited, Lee performs no significant functions that are performed by Tiedemann. As such, Tiedemann cannot practically be modified by the teachings of Lee, because there are no comparable techniques that lend themselves to substitution. There is certainly no motivation to substitute any particular teachings of Lee for the functions of

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Tiedemann. In the absence of such motivation, a combination of Lee and Tiedemann fails to support a *prima facie* case of obviousness of Claim 1. Claim 1 is thus nonobvious over Tiedemann, even in view of Lee. As such, the claims depending from Claim 1 are likewise nonobvious over this combination.

The current amendments to independent Claims 24 and 25 include recitations similar to those noted above with respect to Claim 1. Accordingly, the Examiner will see that independent Claims 24 and 25, as currently amended, are nonobvious over Tiedemann (whether alone, or reasonably combined with Lee) for reasons similar to those set forth above in regard to Claim 1. Every other pending claim is nonobvious over the cited prior art, at least by virtue of properly depending from Claim 1.

Conclusion

In view of the amendments and remarks set forth above, it is respectfully submitted that each and every claim, as presently pending, is properly allowable over any reasonable combination of the cited prior art. As such, the Examiner is respectfully requested to issue a Notice of Allowance in respect of all claims pending after entry of the current amendment.

If any issue can benefit from further clarification, or correction, the Examiner is respectfully urged to contact the undersigned by telephone, so as to facilitate timely completion of prosecution of the subject application.

The Commissioner is authorized to construe this paper as including a petition to extend the period for response by the number of months necessary to make this paper timely filed. Fees or deficiencies required to cause the response to be complete and timely filed may be charged, and any overpayments should be credited, to our Deposit Account No. **50-0490**.

Respectfully submitted,

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